



UDC 636

DOI <https://doi.org/10.15673/>

THE ART OF DESIGNING, OPERATING AND IMPROVING TECHNOLOGIES, RECIPES, SAFETY AND QUALITY OF COMPOUND FEED.

IX session OF THE INTERNATIONAL SCHOOL OF FEEDS



From July 1 to 6, 2024, with the support of the European Federation of Feed Manufacturers, the European Federation of Food Science and Technology, the Association "Union of Feed Manufacturers of Ukraine", the Odessa National University of Technology (ONUT), the ProAgro Group of Companies and the "Club of Young Scientists", ONUT held the IX- and the session of the International Feed School "THE ART OF DESIGN, OPERATION AND IMPROVEMENT OF TECHNOLOGY, RECIPE, SAFETY AND QUALITY OF COMPOUND FEEDS".

Despite martial law, air alarms, blackouts and other obstacles, the session took place, and it was successful. The session was attended by scientists and experts in the field of compound feed production, 3 scientific and project organizations, 17 representatives from 8 compound feed enterprises: MHP, PrJSC Myronivsky



plant for the production of cereals and compound feed, Katerynopil elevator, GRAIN COMPANY "AGROPROGRESS PLUS", VitagroNutryshyn, Kombifeed, "MEGA KORM" LLC, "Kramar" LLC, AGRICON Group.

The first day of work was devoted to trends in design, increasing the efficiency of operation and robotization of feed production. In his report, Bohdan Iehorov, Doctor of Technology, told about the modern production of effective complete ration compound feeds, the successful implementation of fodder, energy and technological potential in modern conditions at compound feed plants with different organization of the technological production process. of Sciences, academician of the National Academy of Sciences of Ukraine, Honored Worker of Science and Technology of Ukraine, laureate of the State Prize of Ukraine in the field of science

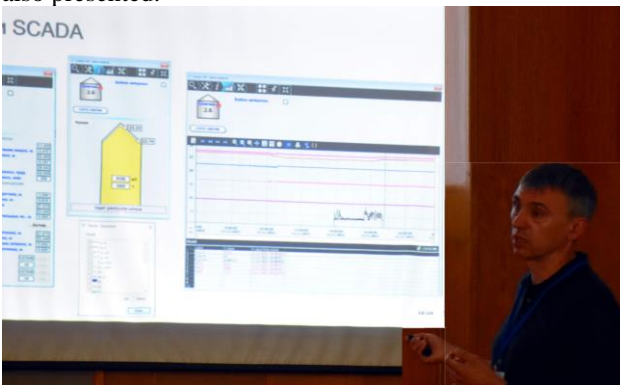




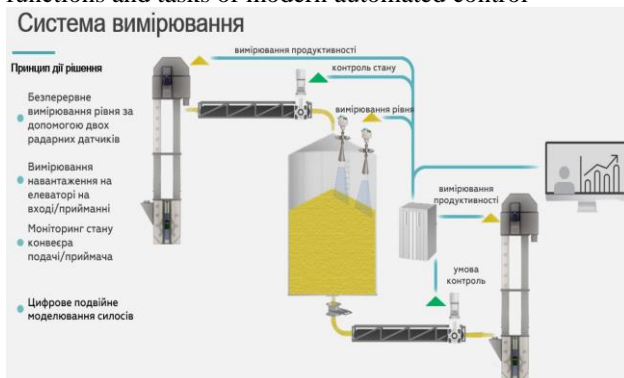
and technology, academician of the National Academy of Sciences of Ukraine, prof. Department of Grain and Compound Feed Technology, President of Odessa National University of Technology.



In the report of Ivan KUN, general director of Interprojekt GmbH (Germany), the features of design and operation of compound feed plants and technological lines for the production of compound feed 5, 10, 20, 30 tons/hour were presented, examples of the implementation of modern design approaches at compound feed plants of Ukraine with the analysis of cyclograms were given. The project of a plant for the production of protein concentrate from sunflower and rapeseed meal was also presented.



Vyacheslav SHESTOPALOV, Ph.D., commercial director of LLC "S-engineering" (Ukraine) spoke about effective energy supply and management systems at modern industrial enterprises. The report considered theoretical and practical aspects of Siemens technologies and own developments of S-engineering LLC, presented an assessment of their effectiveness and energy consumption; examples of effective systems and effective equipment for the grain and processing industry are given; the description of the system of dispatching and technical accounting at enterprises is provided; the main functions and tasks of modern automated control



systems and the structure of the automation system are indicated. The results of a practical approach in the operation and maintenance of SENUMAC optimal control systems, SENUVOL measurement systems are presented, examples of SCADA and products of LLC "S-engineering" are given.



The lecture of Viktor Iehorov, Doctor of Technology, aroused considerable interest among the listeners. of Sciences, founder and scientific director of the FabLab MiRONAFT robotics laboratory, deputy director of the Institute of Applied Management Systems of the National Academy of Sciences, co-founder of the Qweedo Robotic company, which was dedicated to robotic complexes for increasing the efficiency of feed production. After the theoretical part, the participants of the IX session of the ISF underwent practical training in the educational and scientific laboratory of Mechatronics and Robotics "Mironaft", where they independently set technical tasks for robots and managed their work, and in the educational and scientific laboratory of "Digital technologies of automation and electric drive" Educational - scientific institute of computer engineering, automation, robotics and programming named after P.M. Platonova ONUT.



An interesting conclusion of the first day of the session was a tour of the S-engineering company's production, where the participants were able to get to know the full production cycle and the company's special features, starting from cutting, bending and manufacturing of sheet metal parts; mechanical processing of metal (turning-milling group and welding equipment); cutting and manufacturing of copper and aluminum tires; production of metal structures; to the installation of panel equipment and the test laboratory.



FEED, QUALITY, TECHNOLOGY AND ANIMAL FEED



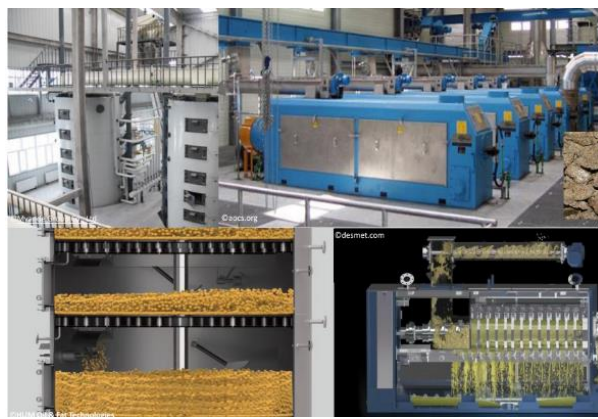
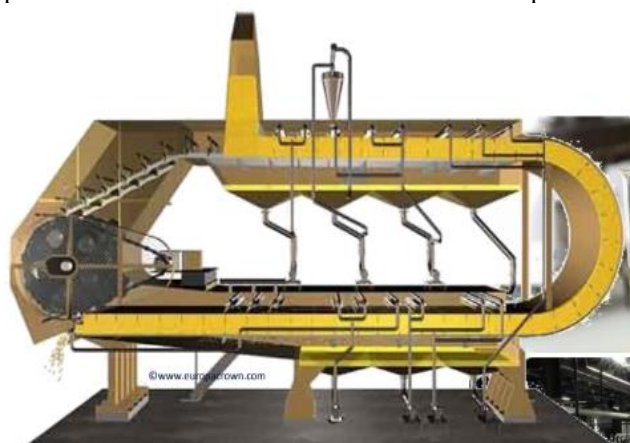
The second day of the 9th session of the ISF was devoted to the features of providing nutrients and biologically active substances, production of compound feed and regulation of their productive action.

Fyodor MARCHENKOV, Ph.D of Biol. of science, deputy director of scientific work of LLC "Biokontakt", PE "Kronos-Agro", about the problems of protein provision of animal feed rations, the use of alternative sources of protein in compound feed - Serhii MELNYCHUK, doctor of biol. Sciences, prof., head of the scientific department of MHP.



Anatolii LEVYTSKY, doctor of technology, spoke about the peculiarities of lipid nutrition of people and farm animals, the peculiarities of compound feed recipes and lipid supply technologies. of Science, professor and Alla LAPINSKA, Ph.D of technology of Sciences, associate professor, Department of Grain and Compound Feed Technologies of ONUT.

The report of Serhii PANASYUK, Technical Director and Daria CHEVGANYUK, Quality Manager of PrJSC ADM Illichivsk discussed the specifics of the production and use of oilseed meal at ADM enterprises.



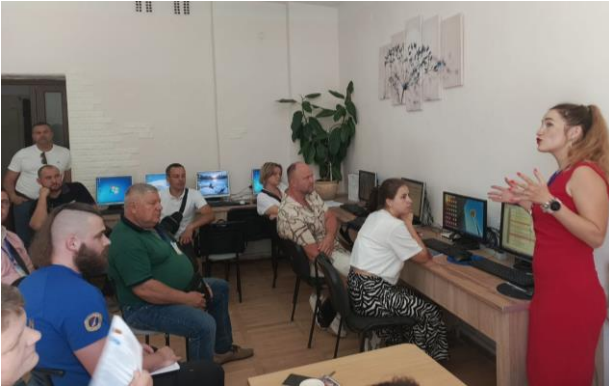
The main areas of activity of the ADM Animal Nutrition company in the world and in Ukraine, the peculiarities of the technological process of processing sunflower seeds at PrJSC ADM Illichivsk were presented in detail.



The participants of the ISF session were introduced to the modern instrumental methods and equipment for determining the quality of grain, feed raw materials and compound feed by Oleksandr PLYE, director of SokTrade LLC. The leading specialists of Sok-Trade LLC presented flow analyzers for control of technological processes, automatic feed raw material analyzers, conducted practical training on working on the company's laboratory equipment, during which the participants were able to independently determine the quality indicators of feed raw materials and ready-made compound feeds.



One day of the training was devoted to the current topic of the art of creating effective compound feed recipes. Peter SURAI, doctor of biol., spoke about increasing the efficiency of the use of compound feed: the role of vitagens in the regulation of immunocompetence and the development of practical approaches to immunomodulation. Sciences, prof., prof. of evolutionary biology and ecology at the University of Glasgow (GB).



Nina VORONA, Ph.D of Technology of Science, associate professor ONUT revealed the scientific and practical secrets of calculating compound feed recipes and conducted a master class for the participants on calculating compound feed recipes, during which the audience actively discussed urgent problems and ways to solve them when choosing modern calculation programs, features of selecting feed components and approaches to calculating effective compound feed recipes.



The technical director of the enterprise Yevhen BARANOVSKY continued the topic of modern compound feed recipes and cited practical aspects of increasing the productive action and economic efficiency of compound feed recipes and talked about the peculiarities of compound feed production at MegaKorm LLC.



On the final day of theoretical and practical training, the issues of the economic block, certification and technical support for the production of compound feed were considered. The real aspects of applied economics at the enterprise were discussed in the report of Serhii DIDUKH, doctor of economics. Sciences, prof., Chairman of the Supervisory Board of Tecom Asset Management LLC AMC. Hryhoriy MAZUR, advisor to

Cite as Vancouver Citation Style

Igorov B., Makarynska A. The art of designing, operating and improving technologies, recipes, safety and quality of compound feed. IX session of the International School of Feeds. Grain Products and Mixed Fodder's, 2024, 24 (2, 94): 25-28.

the general director of Technik BG GmbH (Germany), spoke about modern certification systems and the general requirements of feed and feed component production enterprises.

Also, on the last day, the participants got acquainted with the company's philosophy, production features, main workshops and production areas, areas of professional activity, products, new developments and projects for the grain and processing industries during a tour of the production of the "Grain Capital" Group.



The training ended with the ceremonial presentation of certificates during the Master-class on tasting Odesa wines in the sensory analysis laboratory of ONUT. The results of the work were summarized at a round table, where issues of personnel, safety, production, economy were considered and the resolution of the ISF-2024 was adopted.



The regular work of the ISF session has been completed, a new page has been turned in the close cooperation of science and production, aimed at the further development and prosperity of the compound feed industry. See you soon, dear friends!